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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,682	02/20/2004	Harvey A. Restaino	C382.12-0146	6991
27367 7590 11/24/2008 WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3244				
EXAMINER BERHANU, SAMUEL				
ART UNIT 2838		PAPER NUMBER		
MAIL DATE 11/24/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/783,682

**Applicant(s)**

RESTAINO ET AL.

**Examiner**

SAMUEL BERHANU

**Art Unit**

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 24 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolf (US 3,267,452) in view of, Johnson (4,969,834) and in view of Vonderhaar et. al. (US 6,469,511)(Vonderhaar)

As to Claim 24, Wolf discloses in Figures 1-4, an apparatus for coupling at least a battery tester to a battery comprising: a replaceable clamp (see figures 1-4) comprising:  
a first hand grip (10); a first electrical plug (the first handle portion 21) positioned in the first hand grip and electrically coupled to a first set of conductors (the first electrical wires); a cable (20) including a second set of Kelvin conductors; and a second electrical plug (24) electrically coupled to the second set of conductors, wherein the first electrical plug (21) and the second electrical plug (24) are configured to electrically couple together in the first hand grip such that the first set of conductors and the second set of Kelvin conductors are removably electrically coupled together (noted that Wolf discloses in Figure 1, the conductor wires are connected electrically by the compressing the handle portions 21 and 24 rearwardly, see column 2, lines 63-68).

Wolf does not disclose explicitly, Kelvin conductors, first electrical plug and the second electrical plug are configured to removably electrically couple together in the first hand grip such that the first set of Kelvin conductors and the second set of Kelvin conductors are removably electrically coupled together

Johnson discloses in Figure 4, the apparatus including Kelvin conductors, first electrical plug (20) and the second electrical plug (83) are configured to removably electrically couple together

Vonderhaar discloses in Figure 8 and Column 6, lines 22-24, a four point (Kelvin) connection technique to be used for battery Clamp

It would have been obvious to a person having ordinary skill in the art at the time of the invention to replace Wolf's wire connection means with a plug as taught by Johnson, and also adapt a four point Kelvin connection technique as taught by Vonderhaar in order to provide reliable connection between the cable and the clamp, and to provide accurate measurements.

As to Claim 29, Vonderhaar discloses in Figures 7 and 8 the cable includes a first electrical connector (720) and a second electrical connector (722), wherein at least one of the first connector and the second connector provides a Kelvin connection capable of injecting a forcing function into the battery and measuring a voltage across the battery (Column 5, lines 1-26)

It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a voltage monitoring means as taught by Vonderhaar

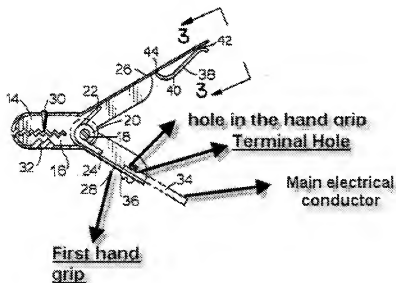
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in Wolf's clamp assembly in order to monitor status of a battery and identify discharge and overcharge battery to avoid battery damage

3. Claim 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolf in view of Johnson, in view of Vonderhaar, and in view of Polizzano (US 4,057,313).

As to Claim 25, Wolf, Johnson, and Vonderhaar disclose all of the claim limitations, except a terminal coupled to the cable and having a terminal hole configured for alignment with an aperture in the first hand grip

Polizzano discloses in Figures 1-2 (see figure below), a terminal coupled to the cable and having a terminal hole configured for alignment with an aperture in the first hand grip



It would have been obvious to a person having ordinary skill in the art at the time of the invention to substitute Johnson's cable connection means and secure the cable in the handle portion with a removable fastener means as taught by Polizzano in order to provide reliable connection between for the battery Clamp.

As to Claim 26, Polizzano discloses in Figure above, a removable fastener which couples the terminal to the first hand grip.

As to Claim 27, Polizzano discloses the terminal comprises a tin-plates ring.

4. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolf in view of Johnson, in view of Vonderhaar, in view of Polizzano and in view of Hatrock (US 4,983,086).

As to Claim 28, Wolf, Johnson, Vonderhaar and Polizzano disclose all of the claim limitations, except the replaceable fastener comprises a nut and bolt.

Hatrock discloses in Figure 1, the replaceable fastener comprises a nut and bolt. It would have been obvious to use a nut and a bolt fastener means as taught by Hatrock in Wolf's clamp in order to provide securable fastener assembly.

5. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolf in view of Johnson, in view of Vonderhaar, and in view of Hatrock (US 4,983,086).

As to Claim 30, Wolf, Johnson, and Vonderhaar disclose all of the claim limitations, except the first and second electrical connectors comprise acid-resistant connectors.

Hatrock disclose the first and second electrical connectors comprise acid-resistant connectors (Column 5, lines 9-17).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a non-metallic acid resistant material as taught by Hatrock in Wolf's electrical connection in order to improve life of the electrical connection.

6. Claims 31 -35 , 37 and 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolf in view of Johnson, in view of Vonderhaar, and in view of Polizzano (US 4,057,313).

As to Claim 31, Wolf discloses in Figures 1-4, an apparatus for coupling at least a battery tester to a battery comprising: a replaceable clamp (see figures 1-4) comprising: a first hand grip (10); a first electrical plug (the first handle portion 21) positioned in the first hand grip and electrically coupled to a first set of conductors (the first electrical wires); a cable (20) including a second set of Kelvin conductors; and a second electrical plug (24) electrically coupled to the second set of conductors, wherein the first electrical plug (21) and the second electrical plug (24) are configured to electrically couple together in the first hand grip such that the first set of conductors and the second set of Kelvin conductors are removably electrically coupled together (noted

that Wolf discloses in Figure 1, the conductor wires are connected electrically by the compressing the handle portions 21 and 24 rearwardly, see column 2, lines 63-68).

Wolf does not disclose explicitly, Kelvin conductors, first electrical plug and the second electrical plug are configured to removably electrically couple together in the first hand grip such that the first set of Kelvin conductors and the second set of Kelvin conductors are removably electrically coupled together, a terminal coupled to the cable and having a terminal hole configured for alignment with an aperture in the first hand grip.

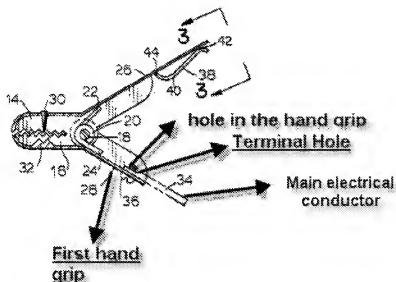
Johnson discloses in Figure 4, the apparatus including Kelvin conductors, first electrical plug (20) and the second electrical plug (83) are configured to removably electrically couple together

Vonderhaar discloses in Figure 8 and Column 6, lines 22-24, a four point (Kelvin) connection technique to be used for battery Clamp

It would have been obvious to a person having ordinary skill in the art at the time of the invention to replace Wolf's wire connection means with a plug as taught by Johnson, and also adapt a four point Kelvin connection technique as taught by Vonderhaar in order to provide reliable connection between the cable and the clamp, and to provide accurate measurements.

Further, Polizzano discloses in Figures 1-2 (see figure below), a terminal coupled to the cable and having a terminal hole configured for alignment with an aperture in the first hand grip





It would have been obvious to a person having ordinary skill in the art at the time of the invention to Modify Wolf's cable connection means and secure the cable in the handle portion with a removable fastener means as taught by Polizzano in order to provide reliable connection between for the battery Clamp

As to Claim 37, Vonderhaar discloses the cable includes a first electrical connector (720) and a second electrical connector (722), wherein at least one of the first connector and the second connector provides a Kelvin connection capable of injecting a forcing function into the battery and measuring a voltage across the battery (Column 5, lines 1-26)

It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a voltage monitoring means as taught by Vonderhaar

in Wolf's clamp assembly in order to monitor status of a battery and identify discharge and overcharge battery to avoid battery damage

7. Claim 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolf in view of Johnson, in view of Vonderhaar, in view of Polizzano and in view of Hatrock (US 4,983,086).

As to Claim 36, Wolf, Johnson, Vonderhaar and Polizzano disclose all of the claim limitations, except the replaceable fastener comprises a nut and bolt.

Hatrock discloses in Figure 1, the replaceable fastener comprises a nut and bolt. It would have been obvious to use a nut and a bolt fastener means as taught by Hatrock in Wolf's clamp in order to provide securable fastener assembly.

As to Claim 38, Hatrock disclose the first and second electrical connectors comprise acid-resistant connectors (Column 5, lines 9-17).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a non-metallic acid resistant material as taught by Hatrock in Wolf's electrical connection in order to improve life of the electrical connection.

As to claims 39-42 the method steps will be met during the normal operation of the apparatus described above.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMUEL BERHANU whose telephone number is (571)272-8430. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm Ullah can be reached on 571-272-2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Akm Enayet Ullah/  
Supervisory Patent Examiner, Art  
Unit 2838

/S. B./  
Examiner, Art Unit 2838

**Application Number****Application/Control No.**

10/783,682

**Applicant(s)/Patent under  
Reexamination**

RESTAINO ET AL.

**Examiner**

SAMUEL BERHANU

**Art Unit**

2838